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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------------------|------------------|
| 10/086,795 | 02/28/2002 | Jonathan Foote | FXPL-1033US0 MCF/SRB | 8973 |
| 23910 | 7590 | 03/04/2005 | | |
| FLIESLER MEYER, LLP FOUR EMBARCADERO CENTER SUITE 400 SAN FRANCISCO, CA 94111 | | | EXAMINER FULLER, RODNEY EVAN | |
| | | | ART UNIT 2851 | PAPER NUMBER |

DATE MAILED: 03/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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|------------------------------|--------------------------------------|-------------------------------------|--|
| Office Action Summary | Application No. 10/086,795 | Applicant(s) FOOTE ET AL. | |
| | Examiner Rodney E. Fuller | Art Unit 2851 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 May 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

RODNEY FULLER
PRIMARY EXAMINER

R. Fuller

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 20, 2004 has been entered.

Remarks

2. The examiner acknowledges the cancellation of claim 24. Claims 1-23 are pending.

3. In the Reply to Office Action, dated December 20, 2004, the applicant repeated the arguments in the Response, dated April 28, 2004. The Advisory Action, dated May 27, 2004, in reply to applicant's Response stated that: "The examiner does not find the applicant's arguments persuasive in overcoming the previous rejection based upon the Alexander reference."

4. The examiner maintains the prior rejection and maintains that Alexander (US 6,067,126) discloses all the structure set forth in the claims. (See Office Action mailed February 25, 2004.)

5. However, in event that Alexander is interpreted to "not disclose any edits to an aligned video" and to "only disclose[s] augmenting a video by adding an audio track,

then the claimed limitations would be obvious in view of Alexander and Hu, et al. (US 2002/0191107).

Claim Rejections – 35 USC § 102 and 35 USC § 103

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-7, 18-20, 22 and 23 are rejected under 35 U.S.C. 102(b) as anticipated by Alexander (US 6,067,126) or, in the alternative, under 35 U.S.C. 103(a) as obvious over Alexander (US 6,067,126) in view of Hu, et al. (US 2002/0191107).

(Note: The 35 USC 102(b) rejection is repeated from Office Action, dated February 25, 2004).

9. Claims 1-7, 18-20, 22 and 23 are rejected under 35 U.S.C. 102(b) as anticipated by Alexander (US 6,067,126). Alexander discloses a method and apparatus for editing a video recording with audio selections. The method includes receiving an audio and video signal, detecting transition points in the audio and video signals, aligning the audio and video signals in time, editing the aligned video signal and then merging the

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aligned video signal with the audio signal. (Column 3, lines 1-19, for example.) The transition points are necessarily detected to form segments of the video and audio signals for time alignment. Thus, the transition points in the video and audio signals define the beginning and ending boundaries of the video and audio segments, giving the segments a "length" in terms of time. (Column 5, lines 1-29, for example.) The video segments may be selected and/or truncated after evaluation for suitability to the audio files to match the audio segments in length by modifying the boundaries of the video segments (column 5, lines 1-10). The tempo of the audio file may also be used to align the video segments to the audio segments (column 8, lines 26-31) and the volume of the audio signal may be reduced in volume so as not to smother the existing "second" audio file (column 6, line 58 through column 7, line 11). Finally, the method of Alexander includes a processor 702 receiving instructions to control the apparatus via dynamic programming control (shown, for example, in Page 3 Figure 7).

10. In the alternative, claims 1-7, 18-20, 22 and 23 are rejected under 35 U.S.C. 103(a) as obvious over Alexander (US 6,067,126) in view of Hu, et al. (US 2002/0191107).

In event that Alexander is interpreted to "not disclose any edits to an aligned video" and to "only disclose[s] augmenting a video by adding an audio track, then the claimed limitations would be obvious in view of Alexander and Hu, et al. (US 2002/0191107).

Alexander discloses one embodiment wherein the video signal is spit into segments wherein the length of the sampled video signal corresponds to an average length of an audio file. (Column 5, lines 4) (Underline emphasis added) Alexander also discloses wherein the "A/V editing system identifies an appropriate audio selection from a plurality of available audio selections with which to augment the received A/V signal." (Column 3, lines 11-14) Thus, one could interpret Alexander (as argued by applicant) that "the length of the video is determined before the video is analyzed." However, given that Alexander initially selects a length of video signal that corresponds to an average length of an audio file, this would indicate that the audio and video lengths might not correspond exactly.

Hu discloses that the video and audio samples are "ultimately truncated so that the resultant audio frame does not exceed the length of the encoded video frame." (Paragraph 0029).

Thus, it would have been obvious to one of ordinary skill in the art to modify Alexander wherein the aligned video is edited (i.e., the aligned video or aligned audio signal is truncated).

The ordinary artisan would have been motivated to modify Alexander in the manner described above for so that the resultant audio and video signals are of equal length in order to precisely synchronize audio and video data. (See Hu, paragraph 001 and paragraph 0029)

11. Claims 8-17 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alexander in view of either "Automatic Audio Segmentation Using a Measure of Audio Novelty" by Foote or "Scene Boundary Detection via Video Self-similarity Analysis" by Cooper et al as prior art acknowledged by the Applicant. Alexander discloses all that is claimed except for the features explicitly recited in the above-referenced claims. Both of the aforementioned publications to Foote and Cooper et al. disclose detecting transition points in audio and/or video signals by parameterizing the signals to form corresponding sets of feature vectors and evaluating the vectors to determine the location of the transition points. Both publication also teach including a histogram or a frequency domain transform as a part of the parameterization and performing the evaluation by determining a difference between adjacent vectors, comparing the time period between a previous transition and a feature vector to determine the transition location or an accumulated difference between a plurality of vectors. Finally, the publications also teach constructing a self-similarity matrix based upon a distance matrix for a set of feature vectors and extracting structure from the matrix via a kernel correlation, where the width of the kernel can determine the duration of the transitions. The distance metric may be either the Euclidian distance between the vectors, the cosine of the angle between the vectors, or the Karhunen-Loeve distance (via principal component analysis).

It would have been obvious to one of ordinary skill in the art to incorporate the various well-known methods of parameterizing the audio and video signals to form corresponding sets of feature vectors and subsequent well-known methods of

evaluation of the vectors to determine the locations of the transitions in the signals as taught by the publications of Foote and Cooper et al. into the method of Alexander for the purpose of providing an efficient and simple means for editing a video recording with audio selections.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney E. Fuller whose telephone number is 571-272-2118. The examiner can normally be reached on 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on 571-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Rodney E Fuller
Primary Examiner
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March 1, 2005